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**UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY**

SERGEY ALEYNIKOV,

Plaintiff,

v.

THE GOLDMAN SACHS GROUP, INC.,

Defendant.

No. 12 Civ. _____

VERIFIED COMPLAINT

Plaintiff, Sergey Aleynikov (“Aleynikov”), through his undersigned attorneys, by way of Verified Complaint against Defendant, The Goldman Sachs Group, Inc. (“Goldman Sachs”), alleges as follows:

NATURE OF THE ACTION

1. This is an action for indemnification for attorneys’ fees and expenses Aleynikov incurred in now-concluded federal criminal proceedings brought against him by reason of his employment as an officer of Goldman, Sachs & Co., a subsidiary of Goldman Sachs; for advancement of attorneys’ fees and expenses Aleynikov incurs in now-pending state criminal proceedings brought against him by reason of his employment as an officer of Goldman, Sachs & Co.; and for the attorneys’ fees and expenses Aleynikov incurs in this civil action to secure such indemnification and advancement (“fees on fees”). Specifically, Aleynikov seeks (a) a

judgment directing Goldman Sachs to pay the attorneys' fees and costs he incurred in winning a Judgment of Acquittal of federal criminal charges brought against him in the United States District Court for the Southern District of New York in United States v. Aleynikov, 10 Cr. 0096, for allegedly violating federal law by downloading and transporting computer source code for Goldman Sachs's high-frequency trading system (the "Federal Charges"); (b) a preliminary injunction and final judgment directing Goldman Sachs to advance the reasonable attorneys' fees and costs Aleynikov will now incur to defend state criminal charges brought against him in People v. Aleynikov, 2012-NY-60353, and any indictment resulting therefrom, for allegedly violating New York law in connection with the same computer source code (the "State Charges"); and (c) an Order directing Goldman Sachs to pay the reasonable legal fees and expenses Aleynikov incurs in this action to enforce his right to indemnification and advancement.

2. On July 3, 2009, agents of the Federal Bureau of Investigation (the "FBI") arrested Aleynikov and charged him with violating federal law by downloading and transporting computer source code for Goldman Sachs's high-frequency trading system a month earlier, during the final days of his employment at the company. A federal grand jury sitting in the United States District Court for the Southern District of New York indicted Aleynikov on the Federal Charges on February 11, 2010.

3. The District Court granted Aleynikov's motion to dismiss one count of the Indictment for failure to state a crime but denied his motion to dismiss the other two counts. Aleynikov proceeded to trial on those counts, was convicted on December 10, 2010, and was

sentenced to 97 months in prison. A Judgment of Conviction reflecting that conviction and sentence was entered on March 23, 2011.

4. Aleynikov appealed his Judgment of Conviction to the United States Court of Appeals for the Second Circuit. On February 16, 2012, the Second Circuit reversed that Judgment of Conviction and ordered that Aleynikov be released from prison immediately. On April 11, 2012, the Second Circuit issued a unanimous written opinion explaining its reasons for entering the Judgment of Acquittal in Aleynikov's favor.

5. Following his exoneration on the Federal Charges, Aleynikov was arrested in New Jersey on August 2, 2012, on a fugitive warrant that commanded his appearance before a New York State court to answer the State Charges. On August 9, 2012, Aleynikov waived extradition and pleaded not guilty to those charges. The Manhattan District Attorney's Office has indicated that it plans to seek an Indictment on the State Charges imminently. Aleynikov has indicated that he will plead not guilty to such an Indictment.

6. Aleynikov is entitled to indemnification for the reasonable legal fees and expenses he incurred in his successful defense of the Federal Charges and to advancement of the reasonable legal fees and expenses he will incur to defend the State Charges because both the Federal Charges and the State Charges were instituted by reason of the fact that he was an officer of Goldman Sachs. Accordingly, he has (a) demanded indemnification for the reasonable legal fees and costs he incurred in his successful defense of the Federal Charges; (b) demanded that Goldman Sachs honor its advancement obligation with respect to the State Charges; and (c) provided Goldman Sachs with an undertaking in which he has promised to repay the legal fees and expenses advanced to him to defend the State Charges if it is ultimately determined that he is

not entitled to indemnification with respect to those charges. Despite those demands and that undertaking, Goldman Sachs has failed to honor its obligation to provide such indemnification and advancement.

7. Aleynikov exhausted his financial resources prior to his trial on the Federal Charges and owes a substantial sum for the legal fees and expenses he incurred in his successful defense of those charges in the Southern District of New York and the Second Circuit Court of Appeals. Thus, unless the Court orders Goldman Sachs to honor its legal obligation to advance his legal fees and expenses to defend the State Charges, Aleynikov's ability to defend those charges will be irreparably harmed. That threat of irreparable harm, Aleynikov's substantial likelihood of success on the merits of his advancement claim, the balancing of equities in favor of advancement, and the strong public interest in the enforcement of corporate advancement obligations entitle him to a preliminary injunction requiring Goldman Sachs to advance his legal fees and expenses to defend the State Charges and — because there are no genuine issues of material fact and he is entitled to judgment as a matter of law on his advancement claim — to summary judgment in his favor and against Goldman Sachs on his claim for advancement of legal fees and expenses related to the State Charges.

8. Given Aleynikov's complete exoneration on the Federal Charges, his right to indemnification for his legal fees and expenses to defend those charges is equally clear and also ripe for summary disposition.

9. Because Goldman Sachs caused this action to be filed by refusing to honor its advancement and indemnification obligations to Aleynikov as defined by Delaware law and the

company's own bylaws, Goldman Sachs must also bear the legal fees and expenses Aleynikov incurs in pursuing this action, plus prejudgment interest.

THE PARTIES

10. Aleynikov is a resident of the State of New Jersey, the County of Essex and the Township of West Orange. Until June 30, 2009, Aleynikov was a Vice President in the Global Equities Division of Goldman, Sachs & Co.

11. Goldman Sachs is a corporation organized under the laws of the State of Delaware with its principal executive offices located at 200 West Street, New York, New York 10282. Goldman Sachs is the limited partner of Goldman, Sachs & Co., which is an indirectly wholly owned subsidiary of Goldman Sachs. Goldman Sachs has offices in Jersey City and Princeton, New Jersey, and regularly conducts business in the State of New Jersey, both directly and through its subsidiaries.

JURISDICTION AND VENUE

12. This Court has jurisdiction of this action pursuant to 28 U.S.C. § 1332 because complete diversity of citizenship exists between the parties and Aleynikov's damages are in excess of \$75,000.

13. Venue is appropriate in this judicial district under 28 U.S.C. § 1391(b) because a substantial part of the events or omissions giving rise to the claims in this case occurred in the State of New Jersey. Specifically, Aleynikov was arrested on both the State and Federal Charges while in New Jersey; Aleynikov resided in New Jersey during his tenure as a Goldman Sachs Vice President; and most of the defense costs at issue in this case were or will be incurred in New Jersey.

FACTUAL ALLEGATIONS

A. Goldman Sachs

14. Goldman Sachs, through its subsidiary Goldman, Sachs & Co., provides financial services in the United States and around the world and is engaged in, among other activities, high-frequency trading on various commodity and equity markets.

B. Aleynikov

15. From May 7, 2007 through June 30, 2009, Aleynikov was employed by Goldman, Sachs & Co. as a Vice President in its Equities Division.¹ Aleynikov was a member of the team of computer programmers that was responsible for developing and improving certain source code relating to Goldman Sachs's high-frequency trading business. Aleynikov had security clearance to access all files related to Goldman Sachs's high-frequency trading system.

16. On or about July 1, 2009, Goldman Sachs, through its employees and agents, contacted the United States Attorney's Office for the Southern District of New York and/or the Federal Bureau of Investigation (the "FBI"), to report that Aleynikov had electronically transferred files relating to its high-frequency trading system outside of Goldman Sachs during his final days at the office.

C. Aleynikov's Arrest And Federal Indictment.

17. Agents of the FBI arrested Aleynikov at Newark Liberty International Airport in Newark, New Jersey on July 3, 2009. Aleynikov was charged in a Criminal Complaint, which alleged that he violated federal law by, inter alia, transferring source code outside of Goldman Sachs.

¹ Although Aleynikov was employed by Goldman, Sachs & Co. through June 30, 2009, his last day in the office was June 5, 2009.

18. In a three-count indictment returned on February 11, 2010 (the “Indictment”), a federal grand jury charged Aleynikov with violations of federal law based on that alleged misconduct. A true and correct copy of the Indictment is attached hereto as Exhibit A.

19. Aleynikov retained Marino, Tortorella & Boyle, P.C. (“MTB”) to represent him with respect to the Indictment on April 28, 2010.

D. The District Court Proceedings.

20. MTB filed a motion to dismiss the Indictment on July 16, 2010, arguing that it failed to state an offense under the federal statutes Aleynikov was charged with violating. In a written opinion issued on September 3, 2010, the Honorable Denise L. Cote, U.S.D.J., dismissed one count of the Indictment but declined to dismiss the other counts and ordered Aleynikov to proceed to trial. United States v. Aleynikov, 737 F. Supp. 2d 173 (S.D.N.Y. 2010).

21. On December 10, 2010, the jury found Aleynikov guilty on both counts remaining in the Indictment.

22. On March 18, 2011, Judge Cote sentenced Aleynikov to a term of imprisonment of 97 months.

E. Aleynikov’s Successful Appeal And Judgment Of Acquittal.

23. On March 23, 2011, Aleynikov timely filed a notice of appeal of his conviction and sentence to the United States Court of Appeals for the Second Circuit. The Second Circuit heard oral argument on Aleynikov’s appeal on February 16, 2012, and later that day summarily reversed his conviction and ordered his release from custody.

24. The Second Circuit issued an opinion on April 11, 2012, explaining its conclusion that Aleynikov’s conduct did not constitute a crime under either federal statute charged in the Indictment. United States v. Aleynikov, 676 F.3d 71 (2d Cir. 2012).

25. On June 5, 2012, following the issuance of the Second Circuit's Mandate, the District Court entered a Judgment of Acquittal in Aleynikov's favor, thereby confirming his successful defense of the Federal Charges in their entirety. A true and exact copy of that Judgment of Acquittal is annexed to this Verified Complaint as Exhibit B.

26. In defending the Federal Charges, Aleynikov incurred legal fees and expenses totaling \$2,383,002.56, of which he was only able to pay \$547,960.00 before being rendered impecunious.

F. The New York State Charges.

27. On August 2, 2012, Aleynikov was arrested in New Jersey as an alleged "fugitive from justice" based on New York State charges relating to his alleged download of computer source code to Goldman Sachs's high-frequency trading system during his final days at work — the same conduct underlying the Federal Charges.

28. The Felony Arrest Warrant, dated August 1, 2012, alleges that on June 5, 2009, at Goldman Sachs's offices in New York, New York, Aleynikov copied computer source code for Goldman's high-frequency trading system without having the right to do so, thereby violating various state laws. A true and correct copy of the Felony Arrest Warrant is attached hereto as Exhibit C.

29. The Manhattan District Attorney's Office has advised Aleynikov's counsel that it will seek an indictment on those charges in the near future.

30. Although Aleynikov intends to fight the State Charges, he is currently unemployed, relies on the charity of friends to provide him with shelter, and lacks sufficient resources to retain MTB to defend him.

G. Goldman Sachs's Bylaws Require Mandatory Indemnification And Advancement Of Legal Expenses Of Its Officers To The Fullest Extent Permitted By Law.

31. The Amended and Restated By-Laws of The Goldman Sachs Group, Inc., as amended and restated as of May 7, 2010 (the "By-Laws"), provide for the mandatory indemnification and advancement of legal expenses of former officers of its subsidiaries, including Goldman, Sachs & Co., to the fullest extent permitted by law. Specifically, § 6.4 of the By-Laws provides, in part, as follows:

Section 6.4. Indemnification. The Corporation *shall indemnify to the full extent permitted by law* any person made or threatened to be made a party to any action, suit or proceeding, *whether* civil, *criminal*, administrative or investigative, by reason of the fact that such person or such person's testator or intestate is or was a director or officer of the Corporation, is or was a director, *officer*, trustee, member, stockholder, partner, incorporator or liquidator *of a Subsidiary of the Corporation*, is or was a member of the Shareholders' Committee acting pursuant to the Amended and Restated Shareholders' Agreement, dated as of May 7, 1999, among the Corporation and the Covered Persons listed on Appendix A thereto, as amended from time to time, or serves or served at the request of the Corporation as a director, officer, trustee, member, stockholder, partner, incorporator or liquidator of or in any other capacity for any other enterprise. *Expenses, including attorneys' fees, incurred by any such person in defending any such action, suit or proceeding shall be paid or reimbursed by the Corporation promptly upon demand by such person and, if any such demand is made in advance of the final disposition of any such action, suit or proceeding, promptly upon receipt by the Corporation of an undertaking of such person to repay such expenses if it shall ultimately be determined that such person is not entitled to be indemnified by the Corporation. The rights provided to any person by this by-law shall be enforceable against the Corporation by such person, who shall be presumed to have relied upon it in serving or continuing to serve as a director or officer or in such other capacity as provided above. In addition, the rights provided to any person by this by-law shall survive the termination of such person as any such director, officer, trustee, member, stockholder, partner, incorporator or liquidator and, insofar as such person served at the request of the Corporation as a director, officer, trustee, member, stockholder,*

partner, incorporator or liquidator of or in any other capacity for any other enterprise, shall survive the termination of such request as to service prior to termination of such request. No amendment of this by-law shall impair the rights of any person arising at any time with respect to events occurring prior to such amendment.

....

For purposes of this by-law, the term “***Subsidiary***” shall mean any corporation, ***partnership***, limited liability company or other entity ***in which the Corporation owns, directly or indirectly, a majority of the economic or voting ownership interest***; the term “other enterprise” shall include any corporation, partnership, limited liability company, joint venture, trust, association or other unincorporated organization or other entity and any employee benefit plan; the term “officer,” . . . when used with respect to a Subsidiary or other enterprise that is a corporation, shall refer to any person elected or appointed pursuant to the bylaws of such Subsidiary or other enterprise or chosen in such manner as is prescribed by the by-laws of such Subsidiary or other enterprise or determined by the board of directors of such Subsidiary or other enterprise

(By-Laws, § 6.4) (emphasis supplied). A true and correct copy of the By-Laws is attached hereto as Exhibit D.

H. Aleynikov’s Demand For Indemnification And Advancement Of Legal Expenses.

32. By letter dated August 24, 2012, MTB demanded that Goldman Sachs honor its obligations to Aleynikov under Delaware General Corporation Law (“DGCL”) and the By-Laws to: (1) promptly indemnify him for the actual and reasonable legal expenses that he incurred in connection with his defense of the Federal Charges; and (2) promptly begin to advance the actual and reasonable legal expenses he incurs in connection with his defense of the State Charges.² A

² The amount demanded in that letter did not include additional expenses paid directly by Aleynikov totaling \$46,960. Therefore, while Aleynikov demanded \$2,336,042.56 in the August 24, 2012 letter, he seeks \$2,383,002.56 in this action.

true and correct copy of the letter from Kevin H. Marino to Matthew Friedrich dated August 24, 2012 is attached hereto as Exhibit E.

33. Aleynikov also provided Goldman Sachs with an Undertaking by which he promised to repay the legal fees and expenses advanced in connection with the State Charges if it should ultimately be determined that he is not entitled to indemnification. A true and correct copy of the Undertaking is attached to the letter annexed to the Verified Complaint as Exhibit E.

34. Goldman Sachs has not complied with or even responded to Aleynikov's demand for indemnification and advancement.

I. Aleynikov Lacks Sufficient Funds To Pay The Debt Owed To MTB In Connection With The Successful Defense Of The Federal Charges

35. Aleynikov incurred significant legal fees and expenses in connection with his successful defense of the Federal Charges. He exhausted his financial resources long before his trial on the Federal Charges and is currently indebted to MTB for the additional fees and expenses incurred through trial and appellate proceedings. Because he succeeded on each Federal Charge brought against him, Aleynikov is entitled to indemnification for the reasonable fees and expenses incurred in his defense.

36. MTB has agreed to defend Aleynikov on an hourly basis to defend the State Charges and has asked him to provide MTB with an initial retainer of \$500,000 to secure payment of MTB's fees and expenses in connection with the State Charges.

37. As Aleynikov's defense of the Federal Charges left him impecunious, however, he is unable to pay his debts, let alone the retainer necessary for his defense of the State Charges.

**COUNT ONE
(Indemnification)**

38. Aleynikov repeats and realleges the allegations contained in Paragraphs 1 through 37 of this Verified Complaint as though fully set forth herein.

39. Section 145(c) of Delaware General Corporation Law entitles corporate officers who have been successful in their defense of a criminal action to indemnification.

40. Section 6.4 of Goldman Sachs's By-Laws provides, in pertinent part, that Goldman Sachs "shall indemnify to the full extent permitted by law," *inter alia*, an officer of one of its subsidiary companies who is made party to a criminal action by reason of the fact that such person was an officer of the company.

41. As a former Vice President of Goldman, Sachs & Co's Equities Division, Aleynikov is an Officer within the meaning of Article IV, Section 4.1 and Article VI, Section 6.4 of the By-Laws.

42. The Federal Charges, charging that Aleynikov unlawfully downloaded and transported computer source code for Goldman Sachs's high-frequency trading system, were instituted against him by reason of the fact that he was an officer of Goldman, Sachs & Co.

43. Aleynikov was completely successful in his defense of the Federal Charges because he ultimately won an acquittal of all of those charges.

44. Accordingly, Aleynikov is entitled to mandatory indemnification under DGCL § 145(c) and the By-Laws for the actual and reasonable legal expenses he incurred to defend the Federal Charges, totaling \$2,383,002.56.

**COUNT TWO
(Advancement)**

45. Aleynikov repeats and realleges the allegations contained in Paragraphs 1 through 44 of this Verified Complaint as though fully set forth herein.

46. Section 145(e) of the DGCL provides that expenses, including attorneys' fees, incurred by an officer of a corporation in defending any criminal action may be paid by the corporation in advance of the final disposition of such action upon receipt of an undertaking by or on behalf of the officer to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the corporation.

47. Although Section 145(e) permits advancement of legal expenses to a corporate officer, the Goldman Sachs By-Laws mandate such advancement. Section 6.4 of the By-Laws provides: "Expenses, including attorneys' fees, incurred by[]" *inter alia*, an officer made party to a criminal proceeding by reason of the fact that he was or is an officer of one of Goldman Sachs's subsidiaries, "shall be paid or reimbursed by the Corporation promptly upon demand by such person and, if any such demand is made *in advance* of the final disposition of any such action, suit or proceeding, *promptly upon receipt by the Corporation of an undertaking* of such person to repay such expenses if it shall ultimately be determined that such person is not entitled to be indemnified by the Corporation." (emphasis supplied).

48. As a Vice President of Goldman, Sachs & Co's Equities Division, Aleynikov is an Officer within the meaning of Article IV, Section 4.1 and Article VI, Section 6.4 of the By-Laws.

49. The State Charges — which, like the Federal Charges, allege that Aleynikov unlawfully downloaded computer source code for Goldman Sachs's high-frequency trading

system — were instituted against him by reason of the fact that he was an officer of Goldman Sachs.

50. Aleynikov provided Goldman Sachs with an Undertaking, signed and dated by him on August 24, 2012, which stated: “Sergey Aleynikov hereby agrees to repay any expenses paid by Goldman in advance of the final disposition of the State Charges, including any attorneys’ fees incurred on his behalf in defending such action, if it is ultimately determined that he is not entitled to be indemnified by Goldman Sachs as authorized by Del. Code Ann. Tit. 8, § 145 and Section 6.4 of Goldman Sachs’s By-Laws.”

51. Aleynikov is insolvent and would suffer irreparable harm if Goldman Sachs were not required to advance his defense costs in connection with the State Charges.

**COUNT THREE
(Fees on Fees)**

52. Aleynikov repeats and realleges the allegations contained in Paragraphs 1 through 51 of this Verified Complaint as though fully set forth herein.

53. Aleynikov is entitled to mandatory advancement of defense costs from Goldman Sachs in connection with his impending defense of the State Charges.

54. Aleynikov is entitled to mandatory indemnification of defense costs from Goldman Sachs in connection with his successful defense of the Federal Charges.

55. In a letter dated August 24, 2012, Aleynikov demanded that Goldman Sachs honor its obligation to provide advancement and indemnification, together with an undertaking to repay any expenses advanced to him if it is ultimately determined that he is not entitled to be indemnified by Goldman Sachs.

56. Goldman Sachs has not honored or even responded to Aleynikov's demand for indemnification with respect to the Federal Charges and advancement with respect to the State Charges.

57. Aleynikov was compelled to file this Verified Complaint because Goldman Sachs has not honored his demand for indemnification with respect to the Federal Charges and for advancement with respect to the State Charges.

58. Given that Aleynikov was forced to seek judicial intervention to vindicate his clear right to advancement and indemnification by Goldman Sachs, he is entitled to recover the reasonable fees incurred in this action to vindicate that right.

PRAYER FOR RELIEF

WHEREFORE, Aleynikov respectfully requests that this Court enter judgment in his favor and against Goldman Sachs and grant him the following relief:

A. an Order declaring that Aleynikov is entitled to indemnification from Goldman Sachs for the reasonable attorneys' fees and expenses he incurred in his successful defense of the Federal Charges, in the amount of \$2,383,002.56 (or such other amount as the Court determines is fair and reasonable);

B. an Order declaring that Aleynikov is entitled to advancement from Goldman Sachs for the reasonable attorneys' fees and expenses he incurs to defend the State Charges;

C. an Order declaring that Aleynikov is entitled to recover from Goldman Sachs the reasonable attorneys' fees and expenses incurred in this action;

D. an Order declaring that Aleynikov is entitled to prejudgment interest on the reasonable legal fees and expenses for which Goldman Sachs has failed to advance or indemnify Aleynikov, including the reasonable legal fees and expenses incurred in connection with this action;

E. an Order directing Goldman Sachs (i) to advance Aleynikov the reasonable attorneys' fees and expenses incurs to defend the State Charges; (ii) to indemnify Aleynikov for the reasonable attorneys' fees and expenses he incurred in his successful defense of the Federal Charges, in the amount of \$2,383,002.56 (or such other amount as the Court determines is fair and reasonable); (iii) to pay Aleynikov the reasonable legal fees and expenses incurred in connection with this action; and (iv) to pay Aleynikov prejudgment interest on the unpaid advancement, indemnification and fee claims from September 14, 2012; and

F. such other and further relief as this Court may deem just and proper.

Dated: September 25, 2012
Chatham, New Jersey

Respectfully submitted,

MARINO, TORTORELLA & BOYLE, P.C.

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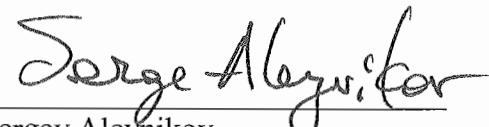
By:


Kevin H. Marino
kmarino@khmarino.com
Attorneys for Plaintiff Sergey Aleynikov

VERIFICATION

I, Sergey Aleynikov, have reviewed the facts set forth in the foregoing Verified Complaint and declare under penalty of perjury, pursuant to 28 U.S.C. § 1746(2), that the statements made in the Verified Complaint are true and correct.

Executed on September 25, 2012



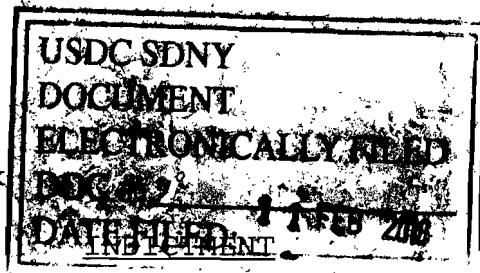
Sergey Aleynikov

EXHIBIT A

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

UNITED STATES OF AMERICA,

- v. -



: 10 Cr.

SERGEY ALEYNIKOV,

Defendant.

10 CRIM 96

COUNT ONE

(Theft of Trade Secrets)

The Grand Jury charges:

Relevant Persons and Entities

1. At all times relevant to this Indictment, Goldman Sachs & Co. ("Goldman") was a company headquartered in New York, New York that provided financial services in the United States and around the world and engaged in other financial activities, including, as detailed below, high-frequency trading on various commodities and equities markets.

2. At all times relevant to this Indictment, Teza Technologies LLC ("Teza") was a company headquartered in Chicago, Illinois that was founded in or about early 2009. Teza's founders sought to develop the technological capability for Teza to engage in high-frequency trading, like Goldman, by the end of 2009.

3. At all times relevant to this Indictment, SERGEY ALEYNIKOV, the defendant, was a computer programmer who resided

JUDGE CORE

in New Jersey. For approximately two years, ALEYNIKOV was employed by Goldman to develop and maintain some of the computer code used to operate Goldman's high-frequency trading business. In or about June 2009, ALEYNIKOV resigned from Goldman to work for Teza.

Background

A. Goldman's High-Frequency Trading System

4. "High-frequency trading" is a type of trading activity carried out in various financial markets, such as the New York Stock Exchange ("NYSE") and NASDAQ Stock Market ("NASDAQ"), in which orders to buy and sell are placed electronically. Typically, high-frequency trading involves the extremely rapid execution of high volumes of trades in which the decisions to make those trades are determined by sophisticated computer programs that use complex mathematical formulas, known as algorithms, to make the trading decisions. Those algorithms, in turn, make trading decisions based upon statistical analyses of past trades and moment-to-moment developments in the markets, among other things. Various banks and financial institutions in the United States, including Goldman, engage in high-frequency trading on various equities and commodities markets.

5. At all times relevant to this Indictment, Goldman's high-frequency trading was supported by a proprietary system of computer programs (the "Platform"), which, among other

things, rapidly obtained information regarding the latest market movements and trends, processed that information into a form that could be analyzed by Goldman's trading algorithms, and then executed the trading decisions resulting from the algorithms. The rapid speed at which the Platform could perform these tasks conferred a competitive advantage to Goldman with respect to its trades. Goldman's high-frequency trading generated many millions of dollars in profits per year.

6. Goldman acquired portions of the Platform, along with other assets, when it purchased the Hull Trading Company in or about 1999 for approximately \$500 million. Since in or about 1999, Goldman has employed many computer programmers to develop and maintain both the Platform and Goldman's trading algorithms. Goldman has not licensed its trading algorithms or the Platform, and has not otherwise made them available to the public.

7. At all times relevant to this Indictment, Goldman's high-frequency trading system - the Platform and the trading algorithms - were comprised of different computer programs. Computer programmers working for Goldman developed and modified the programs used in the high-frequency trading system by writing and altering the "source code" of those programs. "Source code" refers to a series of programming instructions, in a human-readable format, that specify the actions to be performed by a computer program.

B. Goldman's Protections of Its High-Frequency Trading System

8. At various times relevant to this Indictment, Goldman has taken various measures to protect its high-frequency trading system's source code, including the following, among others:

- a. maintaining a firewall which was designed to prevent outsiders from accessing the information stored on Goldman's computer network;
- b. limiting access to the high-frequency trading system's source code only to Goldman employees who had reason to access that source code, such as the programmers working on the system;
- c. blocking certain transfers of information outside of Goldman's computer network and monitoring some transfers of information by employees outside of Goldman's computer network; and
- d. requiring all Goldman employees to agree to a confidentiality agreement that provided, among other things, that employees were to hold "in strict confidence," all "non-public information and materials," including "information and materials describing or relating to the business and financial affairs," "operating procedures," and "policies and procedures of Goldman Sachs," and which further provided that Goldman employees "irrevocably assign to Goldman Sachs" the rights to "any

invention, discoveries, concepts, ideas or information," developed over the course of employment, and that such work "may not be used for any purposes other than the benefit of Goldman Sachs."

C. ALEYNIKOV's Involvement with Goldman's High-Frequency Trading System

9. From in or about May 2007, up to and including in or about June 2009, SERGEY ALEYNIKOV, the defendant, was employed by Goldman as a Vice President in Goldman's Equities Division. Throughout his employment at Goldman, ALEYNIKOV was a member of a team of computer programmers responsible for developing and improving certain aspects of the Platform related to Goldman's high-frequency trading on equities markets. For example, during his employment at Goldman, ALEYNIKOV worked on source code related to the Platform's connection to NASDAQ. At no time during his employment at Goldman was ALEYNIKOV responsible for developing or maintaining any of Goldman's trading algorithms.

10. In or about late April 2009, SERGEY ALEYNIKOV, the defendant, accepted an employment offer from Teza. Teza offered ALEYNIKOV the title of "Executive Vice President, Platform Engineering." In this position, ALEYNIKOV would be responsible for developing, along with other Teza employees, Teza's own high-frequency trading business that would compete with Goldman's business. ALEYNIKOV's last day of work in Goldman's offices was June 5, 2009.

11. At the time SERGEY ALEYNIKOV, the defendant, resigned from Goldman, his total annual compensation was approximately \$400,000. Teza offered ALEYNIKOV a substantial raise, with a total compensation package for 2009 that included an annual salary of approximately \$300,000, a guaranteed bonus of approximately \$700,000, and profit sharing units in Teza valued at approximately \$150,000.

ALEYNIKOV's Theft of Goldman's High-Frequency Trading Source Code

12. Starting at approximately 5:20 p.m. on June 5, 2009 - the last day that SERGEY ALEYNIKOV, the defendant, worked in Goldman's offices in New York, New York - ALEYNIKOV, while at his desk, executed the transfer of hundreds of thousands of lines of source code for Goldman's high-frequency trading system from Goldman's computer network, including files relating to both the Platform and the trading algorithms. In order to evade various security blocks and monitoring features placed by Goldman on its computer network to protect its proprietary systems from theft, ALEYNIKOV uploaded the source code files to an outside server in Germany. Specifically:

a. ALEYNIKOV first executed a computer program that he wrote and which was stored on his home directory in Goldman's computer network, which was titled the "backup" program. Among other things, the "backup" program contained instructions to copy hundreds of thousands of lines of source

code for Goldman's high-frequency trading system from Goldman's computer network. ALEYNIKOV designed the "backup" program to copy one of two different sets of files, depending on whether ALEYNIKOV entered an additional command as he executed the "backup" program. If ALEYNIKOV simply executed the "backup" program without entering the additional command, it would copy (i) very many of the source code files for the Platform and for some of Goldman's trading algorithms, including algorithms that determine the value of stock options and (ii) files from ALEYNIKOV's home directory, at least some of which do not contain Goldman's proprietary source code. If ALEYNIKOV entered the additional command when he executed the "backup" program, however, the "backup" program would exclusively copy source code files related to the Platform's interface with various markets, including NASDAQ. ALEYNIKOV designed the "backup" program to copy many of Goldman's proprietary source code files - including the trading algorithms that determine the value of stock options - that ALEYNIKOV never developed or maintained while employed by Goldman. Once the "backup" program copied the files, it would compress them into a single file. On June 5, 2009, ALEYNIKOV executed the "backup" program twice - once without and once with the additional command - resulting in two compressed files that together contained hundreds of thousands of lines of source code for Goldman's high-frequency trading system.

b. After ALEYNIKOV copied and compressed the source code files, he ran a different program that encrypted them, a process that made those files inaccessible to anyone who did not have the key, or password, to unlock the encryption. After encrypting the files, ALEYNIKOV transferred the files over the internet, without authorization from Goldman and in violation of Goldman's policies, to a server in Germany. This server was associated with a website (the "Website") that offered free and paid services to computer programmers who wished to store their source code projects there.

c. After transferring the source code files to the Website, ALEYNIKOV deleted the program he used to encrypt the files. ALEYNIKOV further deleted his "bash history," a feature of certain computer operating systems that records the most recent commands executed by a programmer. ALEYNIKOV's "bash history" contained a record of ALEYNIKOV's copying of the source code files, the encryption key to the files, and the transfer of the files to the Website. Thus, by deleting the "bash history," ALEYNIKOV was able to hide the fact that he copied, encrypted, and transferred proprietary Goldman files.

13. In the evening of on or about June 5, 2009, and again several days later, SERGEY ALEYNIKOV, the defendant, accessed the Website from his home in New Jersey and downloaded the source code files to his home computer. Several days later,

ALEYNIKOV copied some of these files to other home computers and to a portable flash drive (the "Flash Drive").

14. On many occasions prior to June 5, 2009, and throughout his employment at Goldman, SERGEY ALEYNIKOV, the defendant, transferred, without approval from Goldman and in violation of Goldman's policies, source code for Goldman's high-frequency trading system to his home computers, using various methods including the Website, e-mails sent from his Goldman e-mail account to his personal e-mail account, and, on at least one occasion in 2007, by copying the files onto a portable media player. For example, on the evening of on or about June 4, 2009, while logged on to Goldman's computer network remotely from his home in New Jersey, ALEYNIKOV executed the "backup" program - both with and without the additional command - and uploaded files to the Website. Accordingly, source code for Goldman's high-frequency trading system was stored on various of ALEYNIKOV's personal computers, including ALEYNIKOV's laptop computer (the "Laptop Computer"), the Flash Drive, and the portable media player. At the termination of his employment with Goldman, ALEYNIKOV did not return any of the source code for Goldman's high-frequency trading system to Goldman, in violation of his confidentiality agreement with Goldman.

15. On or about July 2, 2009, ALEYNIKOV flew to Chicago, Illinois, to attend meetings at Teza's offices.

ALEYNIKOV brought with him both the Laptop Computer and the Flash Drive, which, at that time, each contained source code for Goldman's high-frequency trading system, including some of Goldman's source code files that ALEYNIKOV copied and transferred to the Website in Germany on or about June 5, 2009.

Statutory Allegations

16. From at least in or about May 2009, up to and including on or about July 3, 2009, in the Southern District of New York and elsewhere, SERGEY ALEYNIKOV, the defendant, unlawfully, willfully, and knowingly, without authorization copied, duplicated, sketched, drew, photographed, downloaded, uploaded, altered, destroyed, photocopied, replicated, transmitted, delivered, sent, mailed, communicated, and conveyed a trade secret, as that term is defined in Title 18, United States Code, Section 1839(3), and attempted so to do, with intent to convert such trade secret, that was related to and included in a product that was produced for and placed in interstate and foreign commerce, to the economic benefit of someone other than the owner thereof, and intending and knowing that the offense would injure the owner of that trade secret, to wit, ALEYNIKOV, while in New York, New York and elsewhere, without authorization copied and transmitted to his home computer Goldman's proprietary computer source code for Goldman's high-frequency trading business, with the intent to use that source code for the

economic benefit of himself and his new employer, Teza.

(Title 18, United States Code, Sections
1832(a)(2), 1832(a)(4), & 2.)

COUNT TWO

(Transportation of Stolen Property in
Interstate and Foreign Commerce)

The Grand Jury further charges:

17. The allegations in paragraphs 1 through 15 of this Indictment are repeated and realleged as though fully set forth herein.

18. From in or about June 2009, up to and including in or about July 2009, in the Southern District of New York and elsewhere, SERGEY ALEYNIKOV, the defendant, unlawfully, willfully, and knowingly, transported, transmitted, and transferred in interstate and foreign commerce goods, wares, merchandise, securities, and money, of the value of \$5,000 and more, knowing the same to have been stolen, converted and taken by fraud, to wit, ALEYNIKOV, while in New York, New York, copied, without authorization, Goldman's proprietary computer source code for Goldman's high-frequency trading business, the value of which exceeded \$5,000, uploaded the code to a computer server in Germany, and carried that stolen code to a meeting with his new employer, Teza, in Chicago, Illinois.

(Title 18, United States Code, Sections 2314 & 2.)

COUNT THREE

(Unauthorized Computer Access and Exceeding Authorized Access)

The Grand Jury further charges:

19. The allegations of paragraphs 1 through 15 of this Indictment are repeated and realleged as though fully set forth herein.

20. In or about June 2009, in the Southern District of New York and elsewhere, SERGEY ALEYNIKOV, the defendant, unlawfully, intentionally, and knowingly, and, for purposes of commercial advantage and private financial gain, and in furtherance of a criminal and tortious act in violation of the Constitution and the laws of the United States and of any State, accessed a protected computer without authorization and exceeded authorized access, which computer was used in and affecting interstate and foreign commerce and communication, and thereby obtained information from such protected computer the value of which exceeded \$5,000, to wit, ALEYNIKOV, while in New York, New York, in violation of Goldman's policies and his confidentiality agreement with Goldman, accessed a computer server maintained by Goldman and copied Goldman's proprietary computer source code for Goldman's high-frequency trading business, the value of which exceeded \$5,000, uploaded the code to a computer server in Germany, and then downloaded it to his home computer, all with the intent to use that source code for the economic benefit of

himself and his new employer, Teza.

(Title 18, United States Code, Sections 1030(a)(2)(C),
1030(c)(2)(B)(i)-(iii) and 2.)

Jmae Phuwaney
FOREPERSON

Preet Bharara
PREET BHARARA
United States Attorney

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

UNITED STATES OF AMERICA

- v. -

SERGEY ALEYNIKOV

Defendant.

INDICTMENT

10 Cr.

(18 U.S.C. §§ 1832, 2314, 1030 & 2)

PREET BHARARA
United States Attorney.

A TRUE BILL

J. Michael Laddings
Foreperson.

2-11-10 Filed Indictment Case assigned to J. Cote.
WZ

Pitman
U.S.M.J.

EXHIBIT B

UNITED STATES DISTRICT COURT

SOUTHERN

DISTRICT OF

NEW YORK

UNITED STATES OF AMERICA

JUDGMENT OF ACQUITTAL

v.

SERGEY ALEYNIKOV

CASE NUMBER: 10 Cr. 96 (DLC)

By Order dated February 17, 2012, and Opinion dated April 11, 2012, the conviction on Counts One and Two of the Indictment were reversed by the U.S. Court of Appeals for the Second Circuit. Therefore,

~~THE DEFENDANT was found guilty~~ IT IS ORDERED that the Defendant is acquitted, discharged, and any bond exonerated.

USDC SDNY
DOCUMENT
ELECTRONICALLY FILED
DOC #
DATE FILED: 6/5/2012



 Signature of Judge

 Hon. Denise Cote

 Name of Judge

 U.S. District Judge

 Title of Judge

 Date

EXHIBIT C

CRIMINAL COURT OF THE CITY OF NEW YORK
COUNTY OF NEW YORK

Page 1 of 2

THE PEOPLE OF THE STATE OF NEW YORK
-against-

1. Sergey Aleynikov (M 39)

ECAB #
1368249FELONY
(ARREST WARRANT)
ADA LI
212-335-9174

Defendant.

6/24/2012

Deponent

Supervisory Special Agent Michael McSwain, shield 2192 of the Federal Bureau of Investigations, states as follows:

On June 5, 2009, at about 17:20 hours at Goldman Sachs, 85 Broad Street, New York County in the County and State of New York, the Defendant committed the offenses of:

1. PL165.07 Unlawful Use of Secret Scientific Material
(1 count)
2. PL156.30(1) Unlawful Duplication of Computer Related Material
(1 count)

the defendant made a tangible reproduction of secret scientific material with the intent to appropriate the use of such material to a person other than an owner thereof and while having no right to do so or reasonable ground to believe that he had such a right; and the defendant, while having no right to do so, duplicated computer data and a computer program and thereby intentionally and wrongfully deprived an owner thereof of an economic benefit in excess of 2,500 dollars.

The offenses were committed under the following circumstances.

Deponent states that he is informed by a representative of Goldman Sachs, a company headquartered in New York County, that defendant Sergey Aleynikov was previously an employee of Goldman Sachs, and that defendant Aleynikov gave notice of his resignation from Goldman Sachs in April 2009.

Deponent is further informed by a second representative of Goldman Sachs that on the defendant's last day at work, June 5, 2009, at approximately 5:20 pm, while at his desk at Goldman Sachs in New York County, defendant Aleynikov copied and executed the transfer of hundreds of thousands of lines of proprietary and confidential source code for

2012NY060353

CRIMINAL COURT OF THE CITY OF NEW YORK
COUNTY OF NEW YORK

Page 2 of 2

THE PEOPLE OF THE STATE OF NEW YORK	PELONY
-against-	(ARREST WARRANT)
1. Sergey Aleynikov (M 39)	ADA LI
	212-335-9174
	Defendant.

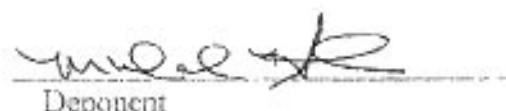
Goldman Sachs' high-frequency trading system (hereinafter "HFTS") from Goldman Sachs' computer network to a foreign server located in Germany.

A HFTS allows for execution of large volume trades in securities, commodities, and options effected in fractions of a second. Trades are executed on the basis of algorithms that incorporate rapid market developments and data from past trades. Thereafter, defendant Aleynikov downloaded these source code files from the foreign server to a computer and to a portable flash drive that he owned.

Deponent further states that in July 2010, defendant admitted, in substance to deponent that he copied and executed the transfer of the above described source code to a foreign server in Germany, and that he later accessed this foreign server from his home and downloaded the source code files to his home computer and to a portable flash drive.

Deponent is further informed by a representative of Goldman Sachs that the defendant did not have permission or authority to copy and transfer said proprietary and confidential computer source code from Goldman Sachs, and that the computer source code is valued at well over \$2500.

False statements made herein are punishable as a class A misdemeanor pursuant to section 210.45 of the penal law.


Deponent

August 1, 2012 / 1:13 PM
Date and Time

EXHIBIT D

As Amended and Restated as of May 7, 2010

**AMENDED AND RESTATED
BY-LAWS
OF
THE GOLDMAN SACHS GROUP, INC.**

ARTICLE I

Stockholders

Section 1.1. Annual Meetings. An annual meeting of stockholders shall be held for the election of directors at such date, time and place either within or without the State of Delaware as may be designated by the Board of Directors from time to time. Any other business properly brought before the meeting may be transacted at the annual meeting.

Section 1.2. Special Meetings. (a) Special meetings of stockholders may be called at any time by, and only by, (i) the Board of Directors or (ii) solely to the extent required by Section 1.2(b), the Secretary of the Corporation. Each special meeting shall be held at such date, time and place either within or without the State of Delaware as may be stated in the notice of the meeting.

(b) A special meeting of the stockholders shall be called by the Secretary upon the written request of the holders of record of not less than twenty-five percent of the voting power of all outstanding shares of common stock of the Corporation (the "Requisite Percent"), subject to the following:

(1) In order for a special meeting upon stockholder request (a "Stockholder Requested Special Meeting") to be called by the Secretary, one or more written requests for a special meeting (each, a "Special Meeting Request," and collectively, the "Special Meeting Requests") stating the purpose of the special meeting and the matters proposed to be acted upon thereat must be signed and dated by the Requisite Percent of record holders of common stock of the Corporation (or their duly authorized agents), must be delivered to the Secretary at the principal executive offices of the Corporation and must set forth:

(i) in the case of any director nominations proposed to be presented at such Stockholder Requested Special Meeting, the information required by the third paragraph of Section 1.11(b);

(ii) in the case of any matter (other than a director nomination) proposed to be conducted at such Stockholder Requested Special

Meeting, the information required by the fourth paragraph of Section 1.11(b); and

(iii) an agreement by the requesting stockholder(s) to notify the Corporation immediately in the case of any disposition prior to the record date for the Stockholder Requested Special Meeting of shares of common stock of the Corporation owned of record and an acknowledgement that any such disposition shall be deemed a revocation of such Special Meeting Request to the extent of such disposition, such that the number of shares disposed of shall not be included in determining whether the Requisite Percent has been reached.

The Corporation will provide the requesting stockholder(s) with notice of the record date for the determination of stockholders entitled to vote at the Stockholder Requested Special Meeting. Each requesting stockholder is required to update the notice delivered pursuant to this Section not later than ten business days after such record date to provide any material changes in the foregoing information as of such record date.

In determining whether a special meeting of stockholders has been requested by the record holders of shares representing in the aggregate at least the Requisite Percent, multiple Special Meeting Requests delivered to the Secretary will be considered together only if each such Special Meeting Request (x) identifies substantially the same purpose or purposes of the special meeting and substantially the same matters proposed to be acted on at the special meeting (in each case as determined in good faith by the Board of Directors), and (y) has been dated and delivered to the Secretary within sixty days of the earliest dated of such Special Meeting Requests. If the record holder is not the signatory to the Special Meeting Request, such Special Meeting Request will not be valid unless documentary evidence is supplied to the Secretary at the time of delivery of such Special Meeting Request (or within ten business days thereafter) of such signatory's authority to execute the Special Meeting Request on behalf of the record holder. Any requesting stockholder may revoke his, her or its Special Meeting Request at any time by written revocation delivered to the Secretary at the principal executive offices of the Corporation; provided, however, that if following such revocation (or any deemed revocation pursuant to clause (iii) above), the unrevoked valid Special Meeting Requests represent in the aggregate less than the Requisite Percent, there shall be no requirement to hold a special meeting. The first date on which unrevoked valid Special Meeting Requests constituting not less than the Requisite Percent shall have been delivered to the Corporation is referred to herein as the "Request Receipt Date".

(2) A Special Meeting Request shall not be valid if:

(i) the Special Meeting Request relates to an item of business that is not a proper subject for stockholder action under applicable law;

(ii) the Request Receipt Date is during the period commencing ninety days prior to the first anniversary of the date of the immediately

preceding annual meeting and ending on the date of the next annual meeting;

(iii) the purpose specified in the Special Meeting Request is not the election of directors and an identical or substantially similar item (as determined in good faith by the Board of Directors, a "Similar Item") was presented at any meeting of stockholders held within the twelve months prior to the Request Receipt Date; or

(iv) a Similar Item is included in the Corporation's notice as an item of business to be brought before a stockholder meeting that has been called but not yet held or that is called for a date within ninety days of the Request Receipt Date.

(3) A Stockholder Requested Special Meeting shall be held at such date and time as may be fixed by the Board of Directors; provided, however, that the Stockholder Requested Special Meeting shall be called for a date not more than ninety days after the Request Receipt Date.

(4) Business transacted at any Stockholder Requested Special Meeting shall be limited to (i) the purpose(s) stated in the valid Special Meeting Request(s) received from the Requisite Percent of record holders and (ii) any additional matters that the Board of Directors determines to include in the Corporation's notice of the meeting. If none of the stockholders who submitted the Special Meeting Request appears or sends a qualified representative to present the matters to be presented for consideration that were specified in the Stockholder Meeting Request, the Corporation need not present such matters for a vote at such meeting, notwithstanding that proxies in respect of such matter may have been received by the Corporation.

Section 1.3. Notice of Meetings. Whenever stockholders are required or permitted to take any action at a meeting, a written notice of the meeting shall be given which shall state the place, date and hour of the meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called. Unless otherwise required by law, the written notice of any meeting shall be given not less than ten nor more than sixty days before the date of the meeting to each stockholder entitled to vote at such meeting. Such notice shall be deemed to be given (i) if mailed, when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the Corporation, (ii) if sent by electronic mail, when delivered to an electronic mail address at which the stockholder has consented to receive such notice; and (iii) if posted on an electronic network together with a separate notice to the stockholder of such specific posting, upon the later to occur of (A) such posting and (B) the giving of such separate notice of such posting. Notice shall be deemed to have been given to all stockholders of record who share an address if notice is given in accordance with the "householding" rules set forth in Rule 14a-3(e) under the Securities Exchange Act of 1934 (the "Exchange Act") and Section 233 of the Delaware General Corporation Law.

Section 1.4. Adjournments. Any meeting of stockholders, annual or special, may be adjourned from time to time, to reconvene at the same or some other place, and notice need not be given of any such adjourned meeting if the time and place thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting the Corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than thirty days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

Section 1.5. Quorum. At each meeting of stockholders, except where otherwise required by law, the certificate of incorporation or these by-laws, the holders of a majority of the outstanding shares of stock entitled to vote on a matter at the meeting, present in person or represented by proxy, shall constitute a quorum. For purposes of the foregoing, where a separate vote by class or classes is required for any matter, the holders of a majority of the outstanding shares of such class or classes, present in person or represented by proxy, shall constitute a quorum to take action with respect to that vote on that matter. Two or more classes or series of stock shall be considered a single class if the holders thereof are entitled to vote together as a single class at the meeting. In the absence of a quorum of the holders of any class of stock entitled to vote on a matter, the meeting of such class may be adjourned from time to time in the manner provided by Sections 1.4 and 1.6 of these by-laws until a quorum of such class shall be so present or represented. Shares of its own capital stock belonging on the record date for the meeting to the Corporation or to another corporation, if a majority of the shares entitled to vote in the election of directors of such other corporation is held, directly or indirectly, by the Corporation, shall neither be entitled to vote nor be counted for quorum purposes; provided, however, that the foregoing shall not limit the right of the Corporation to vote stock, including but not limited to its own stock, held by it in a fiduciary capacity.

Section 1.6. Organization. Meetings of stockholders shall be presided over by a Chairman of the Board, if any, or in the absence of a Chairman of the Board by a Vice Chairman of the Board, if any, or in the absence of a Vice Chairman of the Board by a Chief Executive Officer, or in the absence of a Chief Executive Officer by a President, or in the absence of a President by a Chief Operating Officer, or in the absence of a Chief Operating Officer by a Vice President, or in the absence of the foregoing persons by a chairman designated by the Board of Directors, or in the absence of such designation by a chairman chosen at the meeting. A Secretary, or in the absence of a Secretary an Assistant Secretary, shall act as secretary of the meeting, but in the absence of a Secretary and any Assistant Secretary the chairman of the meeting may appoint any person to act as secretary of the meeting.

The order of business at each such meeting shall be as determined by the chairman of the meeting. The chairman of the meeting shall have the right and authority to adjourn a meeting of stockholders without a vote of stockholders and to prescribe such rules, regulations and procedures and to do all such acts and things as are necessary or desirable for the proper conduct of the meeting and are not inconsistent with any rules or regulations adopted by the Board of Directors pursuant to the provisions of the certificate

of incorporation, including the establishment of procedures for the maintenance of order and safety, limitations on the time allotted to questions or comments on the affairs of the Corporation, restrictions on entry to such meeting after the time prescribed for the commencement thereof and the opening and closing of the voting polls for each item upon which a vote is to be taken.

Section 1.7. Inspectors. Prior to any meeting of stockholders, the Board of Directors, a Chairman of the Board, a Vice Chairman of the Board, a Chief Executive Officer, a President, a Chief Operating Officer, a Vice President or any other officer designated by the Board shall appoint one or more inspectors to act at such meeting and make a written report thereof and may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at the meeting of stockholders, the person presiding at the meeting shall appoint one or more inspectors to act at the meeting. Each inspector, before entering upon the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his or her ability. The inspectors shall ascertain the number of shares outstanding and the voting power of each, determine the shares represented at the meeting and the validity of proxies and ballots, count all votes and ballots, determine and retain for a reasonable period a record of the disposition of any challenges made to any determination by the inspectors and certify their determination of the number of shares represented at the meeting and their count of all votes and ballots. The inspectors may appoint or retain other persons to assist them in the performance of their duties. The date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at a meeting shall be announced at the meeting. No ballot, proxy or vote, nor any revocation thereof or change thereto, shall be accepted by the inspectors after the closing of the polls. In determining the validity and counting of proxies and ballots, the inspectors shall be limited to an examination of the proxies, any envelopes submitted therewith, any information provided by a stockholder who submits a proxy by telegram, cablegram or other electronic transmission from which it can be determined that the proxy was authorized by the stockholder, ballots and the regular books and records of the Corporation, and they may also consider other reliable information for the limited purpose of reconciling proxies and ballots submitted by or on behalf of banks, brokers, their nominees or similar persons which represent more votes than the holder of a proxy is authorized by the record owner to cast or more votes than the stockholder holds of record. If the inspectors consider other reliable information for such purpose, they shall, at the time they make their certification, specify the precise information considered by them, including the person or persons from whom they obtained the information, when the information was obtained, the means by which the information was obtained and the basis for the inspectors' belief that such information is accurate and reliable.

Section 1.8. Voting; Proxies. Unless otherwise provided in the certificate of incorporation, each stockholder entitled to vote at any meeting of stockholders shall be entitled to one vote for each share of stock held by such stockholder which has voting power upon the matter in question. If the certificate of incorporation provides for more or less than one vote for any share on any matter, every reference in these by-laws to a majority or other proportion of shares of stock shall refer to such majority or other

proportion of the votes of such shares of stock. Each stockholder entitled to vote at a meeting of stockholders may authorize another person or persons to act for such stockholder by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. A duly executed proxy shall be irrevocable if it states that it is irrevocable and if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power, regardless of whether the interest with which it is coupled is an interest in the stock itself or an interest in the Corporation generally. A stockholder may revoke any proxy which is not irrevocable by attending the meeting and voting in person or by filing an instrument in writing revoking the proxy or another duly executed proxy bearing a later date with a Secretary. Voting at meetings of stockholders need not be by written ballot unless so directed by the chairman of the meeting or the Board of Directors. In all matters, unless otherwise required by law, the certificate of incorporation or these by-laws, the affirmative vote of not less than a majority of shares present in person or represented by proxy at the meeting and entitled to vote on such matter, with all shares of common stock of the Corporation and other stock of the Corporation entitled to vote on such matter considered for this purpose as a single class, shall be the act of the stockholders. Where a separate vote by class or classes is required, the affirmative vote of the holders of not less than a majority (or, in the case of an election of directors, a plurality) of shares present in person or represented by proxy at the meeting by stockholders in that class or classes entitled to vote on such matter shall be the act of such class or classes, except as otherwise required by law, the certificate of incorporation or these by-laws. For purposes of this Section 1.8, votes cast "for" or "against" and "abstentions" with respect to such matter shall be counted as shares of stock of the Corporation entitled to vote on such matter, while "broker nonvotes" (or other shares of stock of the Corporation similarly not entitled to vote) shall not be counted as shares entitled to vote on such matter.

Section 1.9. Fixing Date for Determination of Stockholders of Record. In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than sixty nor less than ten days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than

sixty days prior to the action for which a record date is being established. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 1.10. List of Stockholders Entitled to Vote. A Secretary shall prepare and make, at least ten days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten days prior to the meeting, either at a place within the municipality where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the whole time thereof and may be inspected by any stockholder who is present.

Section 1.11. Advance Notice of Stockholder Nominees for Director and Other Stockholder Proposals. (a) The matters to be considered and brought before any annual or special meeting of stockholders of the Corporation (other than a Stockholder Requested Special Meeting) shall be limited to only such matters, including the nomination and election of directors, as shall be brought properly before such meeting in compliance with the procedures set forth in this Section 1.11.

(b) For any matter to be properly brought before any annual meeting of stockholders, the matter must be (i) specified in the notice of annual meeting given by or at the direction of the Board of Directors, (ii) otherwise brought before the annual meeting by or at the direction of the Board of Directors or (iii) brought before the annual meeting in the manner specified in this Section 1.11(b) (x) by a stockholder that holds of record stock of the Corporation entitled to vote at the annual meeting on such matter (including any election of a director) or (y) by a person (a "Nominee Holder") that holds such stock through a nominee or "street name" holder of record of such stock and can demonstrate to the Corporation such indirect ownership of, and such Nominee Holder's entitlement to vote, such stock on such matter.

In addition to any other requirements under applicable law, the certificate of incorporation and these by-laws, persons nominated by stockholders for election as directors of the Corporation and any other proposals by stockholders shall be properly brought before an annual meeting of stockholders only if notice of any such matter to be presented by a stockholder at such meeting (a "Stockholder Notice") shall be delivered to a Secretary at the principal executive office of the Corporation not less than ninety nor more than one hundred and twenty days prior to the first anniversary date of the annual meeting for the preceding year; provided, however, that if and only if the annual meeting is not scheduled to be held within a period that commences thirty days before and ends thirty days after such anniversary date (an annual meeting date outside such period being referred to herein as an "Other Meeting Date"), such Stockholder Notice shall be given in the manner provided herein by the later of (i) the close of business on the date ninety

days prior to such Other Meeting Date or (ii) the close of business on the tenth day following the date on which such Other Meeting Date is first publicly announced or disclosed.

Any stockholder desiring to nominate any person or persons (as the case may be) for election as a director or directors of the Corporation at an annual meeting of stockholders shall deliver, as part of such Stockholder Notice, a statement in writing setting forth the name of the person or persons to be nominated, the number and class of all shares of each class of stock of the Corporation owned of record and beneficially by each such person, as reported to such stockholder by such person, the factual information regarding each such person required by paragraphs (a), (e) and (f) of Item 401 of Regulation S-K adopted by the Securities and Exchange Commission, each such person's signed consent to serve as a director of the Corporation if elected, such stockholder's name and address, the number and class of all shares of each class of stock of the Corporation owned of record and beneficially by such stockholder and, in the case of a Nominee Holder, evidence establishing such Nominee Holder's indirect ownership of stock and entitlement to vote such stock for the election of directors at the annual meeting. The Corporation may require any proposed director nominee to furnish such other information as it may reasonably require to determine the eligibility of such proposed nominee to serve as an independent director of the Corporation and to comply with applicable law. If a stockholder is entitled to vote only for a specific class or category of directors at a meeting (annual or special), such stockholder's right to nominate one or more individuals for election as a director at the meeting shall be limited to such class or category of directors.

Any stockholder who gives a Stockholder Notice of any matter (other than a nomination for director) proposed to be brought before an annual meeting of stockholders shall deliver, as part of such Stockholder Notice, the text of the proposal to be presented and a brief written statement of the reasons why such stockholder favors the proposal and setting forth such stockholder's name and address, the number and class of all shares of each class of stock of the Corporation owned of record and beneficially by such stockholder, any material interest of such stockholder in the matter proposed (other than as a stockholder), if applicable, and, in the case of a Nominee Holder, evidence establishing such Nominee Holder's indirect ownership of stock and entitlement to vote such stock on the matter proposed at the annual meeting.

As used in these by-laws, shares "beneficially owned" shall mean all shares which such person is deemed to beneficially own pursuant to Rules 13d-3 and 13d-5 under the Exchange Act.

Notwithstanding any provision of this Section 1.11 to the contrary, in the event that the number of directors to be elected to the Board of Directors of the Corporation at the next annual meeting of stockholders is increased by virtue of an increase in the size of the Board of Directors and either all of the nominees for director at the next annual meeting of stockholders or the size of the increased Board of Directors is not publicly announced or disclosed by the Corporation at least one hundred days prior to the first anniversary of the preceding year's annual meeting, a Stockholder Notice shall also be

considered timely hereunder, but only with respect to nominees to stand for election at the next annual meeting as the result of any new positions created by such increase, if it shall be delivered to a Secretary at the principal executive office of the Corporation not later than the close of business on the tenth day following the first day on which all such nominees or the size of the increased Board of Directors shall have been publicly announced or disclosed.

(c) For any matter to be properly brought before a special meeting of stockholders, the matter must be set forth in the Corporation's notice of such meeting given by or at the direction of the Board of Directors or by the Secretary of the Company pursuant to Section 1.2(a)(ii). In the event the Corporation calls a special meeting of stockholders for the purpose of electing one or more directors to the Board of Directors, any stockholder entitled to vote for the election of such director(s) at such meeting may nominate a person or persons (as the case may be) for election to such position(s) as are specified in the Corporation's notice of such meeting, but only if a Stockholder Notice containing the information required by the third paragraph of Section 1.11(b) hereof shall be delivered to a Secretary at the principal executive office of the Corporation not later than the close of business on the tenth day following the first day on which the date of the special meeting and either the names of all nominees proposed by the Board of Directors to be elected at such meeting or the number of directors to be elected shall have been publicly announced or disclosed.

(d) For purposes of this Section 1.11, a matter shall be deemed to have been "publicly announced or disclosed" if such matter is disclosed in a press release reported by the Dow Jones News Service, the Associated Press or a comparable national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission.

(e) In no event shall the postponement or adjournment of an annual meeting already publicly noticed or a special meeting, or any announcement thereof, commence a new period for the giving of notice as provided in this Section 1.11. This Section 1.11 shall not apply to (i) any stockholder proposal made pursuant to Rule 14a-8 under the Exchange Act, (ii) any nomination of a director in an election in which only the holders of one or more series of Preferred Stock of the Corporation issued pursuant to Article FOURTH of the certificate of incorporation are entitled to vote (unless otherwise provided in the terms of such stock) or (iii) any Stockholder Requested Special Meeting except as specifically provided in Section 1.2(b).

(f) The chairman of any meeting of stockholders, in addition to making any other determinations that may be appropriate to the conduct of the meeting, shall have the power and duty to determine whether notice of nominees and other matters proposed to be brought before a meeting has been duly given in the manner provided in this Section 1.11 or Section 1.2, as applicable and, if not so given, shall direct and declare at the meeting that such nominees and other matters shall not be considered.

ARTICLE II

Board of Directors

Section 2.1. Powers; Number; Qualifications. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors, except as may be otherwise required by law or provided in the certificate of incorporation. The number of directors of the Corporation shall be fixed only by resolution of the Board of Directors from time to time. If the holders of any class or classes of stock or series thereof are entitled by the certificate of incorporation to elect one or more directors, the preceding sentence shall not apply to such directors and the number of such directors shall be as provided in the terms of such stock. Directors need not be stockholders.

Section 2.2. Election; Term of Office; Vacancies. Directors elected at each annual or special meeting of stockholders shall hold office until the next annual meeting of stockholders, and until their successors are elected and qualified or until their earlier resignation or removal. Each director shall be elected by a majority of the votes cast for or against the director at any meeting for the election of directors, provided that if the number of director nominees exceeds the number of directors to be elected, the directors shall be elected by a plurality of the votes of the shares present in person or represented by proxy at any such meeting and entitled to vote on the election of directors. If an incumbent director is nominated at an annual meeting of stockholders but is not elected, the director shall immediately tender his or her resignation to the Board of Directors. Vacancies and newly created directorships resulting from any increase in the authorized number of directors (other than any directors elected in the manner described in the next sentence) or from any other cause shall be filled by, and only by, a majority of the directors then in office, although less than a quorum, or by the sole remaining director. Whenever the holders of any class or classes of stock or series thereof are entitled by the certificate of incorporation to elect one or more directors, vacancies and newly created directorships of such class or classes or series may be filled by, and only by, a majority of the directors elected by such class or classes or series then in office, or by the sole remaining director so elected. Any director elected or appointed to fill a vacancy or a newly created directorship shall hold office until the next annual meeting of stockholders, and until his or her successor is elected and qualified or until his or her earlier resignation or removal.

Section 2.3. Regular Meetings. Regular meetings of the Board of Directors may be held at such places within or without the State of Delaware and at such times as the Board may from time to time determine, and if so determined notice thereof need not be given.

Section 2.4. Special Meetings. Special meetings of the Board of Directors may be held at any time or place within or without the State of Delaware whenever called by the Board, by a Chairman of the Board, if any, by a Vice Chairman of the Board, if any, by a Chairperson of the Corporate Governance and Nominating Committee, if any, by a Chief Executive Officer, if any, by a President, if any, by a Chief Operating Officer, if any, or

by any two directors. Reasonable notice thereof shall be given by the person or persons calling the meeting.

Section 2.5. Participation in Meetings by Conference Telephone Permitted.

Unless otherwise restricted by the certificate of incorporation or these by-laws, members of the Board of Directors, or any committee designated by the Board, may participate in a meeting of the Board or of such committee, as the case may be, by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting pursuant to this by-law shall constitute presence in person at such meeting.

Section 2.6. Quorum; Vote Required for Action. At each meeting of the Board of Directors, one-half of the number of directors equal to (i) the total number of directors fixed by resolution of the board of directors (including any vacancies) plus (ii) the number of directors elected by a holder or holders of Preferred Stock voting separately as a class, as described in the fourth paragraph of Article EIGHTH of the certificate of incorporation (including any vacancies), shall constitute a quorum for the transaction of business. The vote of a majority of the directors present at a meeting at which a quorum is present shall be the act of the Board unless the certificate of incorporation or these by-laws shall require a vote of a greater number. In case at any meeting of the Board a quorum shall not be present, the members or a majority of the members of the Board present may adjourn the meeting from time to time until a quorum shall be present.

Section 2.7. Organization. Meetings of the Board of Directors shall be presided over by a Chairman of the Board, if any, or in the absence of a Chairman of the Board by a Vice Chairman of the Board, if any, or in the absence of a Vice Chairman of the Board, by a Chief Executive Officer, or in the absence of a Chief Executive Officer, by a President, or in the absence of a President, by a Chief Operating Officer, or in the absence of a Chief Operating Officer, by a chairman chosen at the meeting. A Secretary, or in the absence of a Secretary an Assistant Secretary, shall act as secretary of the meeting, but in the absence of a Secretary and any Assistant Secretary the chairman of the meeting may appoint any person to act as secretary of the meeting.

Section 2.8. Action by Directors Without a Meeting. Unless otherwise restricted by the certificate of incorporation or these by-laws, any action required or permitted to be taken at any meeting of the Board of Directors, or of any committee thereof, may be taken without a meeting if all members of the Board or of such committee, as the case may be, then in office consent thereto in writing, and the writing or writings are filed with the minutes of proceedings of the Board or committee.

Section 2.9. Compensation of Directors. Unless otherwise restricted by the certificate of incorporation or these by-laws, the Board of Directors shall have the authority to fix the compensation of directors.

Section 2.10. Director Resignation and Removal. (a) Any director may resign at any time upon written notice to the Board of Directors or to a Chairman of the Board, a Vice Chairman of the Board, a Chief Executive Officer, a President, a Chief Operating

Officer or a Secretary. Such resignation shall take effect at the time specified therein and, unless otherwise specified therein (and except for a resignation described in subsection (b) below), no acceptance of such resignation shall be necessary to make it effective. No director may be removed except as provided in the certificate of incorporation.

(b) In the case of a resignation required to be tendered under Section 2.2 of these by-laws, the Board of Directors will determine, through a process managed by the Corporate Governance and Nominating Committee and excluding the incumbent director in question, whether to accept the resignation at or before its next regularly scheduled Board meeting after the date of the meeting for the election of directors. Absent a significant reason for the director to remain on the Board of Directors, the Board shall accept the resignation. The Board's decision and an explanation of any determination not to accept the director's resignation shall be disclosed promptly in a Form 8-K filed with the United States Securities and Exchange Commission.

ARTICLE III

Committees

Section 3.1. Committees. The Board of Directors may designate one or more committees, each committee to consist of one or more of the directors of the Corporation. The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the Board of Directors or in these by-laws, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to the following matters: (i) approving or adopting, or recommending to the stockholders, any action or matter expressly required by law to be submitted to stockholders for approval or (ii) adopting, amending or repealing these by-laws.

Section 3.2. Committee Rules. Unless the Board of Directors otherwise provides, each committee designated by the Board may adopt, amend and repeal rules for the conduct of its business. In the absence of a provision by the Board or a provision in the rules of such committee to the contrary, a majority of the entire authorized number of members of such committee shall constitute a quorum for the transaction of business, the vote of a majority of the members present at a meeting at the time of such vote if a quorum is then present shall be the act of such committee, and in other respects each committee shall conduct its business in the same manner as the Board conducts its business pursuant to Article II of these by-laws.

ARTICLE IV

Officers

Section 4.1. Officers; Election or Appointment. The Board of Directors shall take such action as may be necessary from time to time to ensure that the Corporation has such officers as are necessary, under Section 5.1 of these by-laws and the Delaware General Corporation Law as currently in effect or as the same may hereafter be amended, to enable it to sign stock certificates. In addition, the Board of Directors at any time and from time to time may elect (i) one or more Chairmen of the Board and/or one or more Vice Chairmen of the Board from among its members, (ii) one or more Chief Executive Officers, one or more Presidents and/or one or more Chief Operating Officers, (iii) one or more Vice Presidents, one or more Treasurers and/or one or more Secretaries and/or (iv) one or more other officers, in the case of each of (i), (ii), (iii) and (iv) if and to the extent the Board deems desirable. The Board of Directors may give any officer such further designations or alternate titles as it considers desirable. In addition, the Board of Directors at any time and from time to time may authorize any officer of the Corporation to appoint one or more officers of the kind described in clauses (iii) and (iv) above. Any number of offices may be held by the same person and directors may hold any office unless the certificate of incorporation or these by-laws otherwise provide.

Section 4.2. Term of Office; Resignation; Removal; Vacancies. Unless otherwise provided in the resolution of the Board of Directors electing or authorizing the appointment of any officer, each officer shall hold office until his or her successor is elected or appointed and qualified or until his or her earlier resignation or removal. Any officer may resign at any time upon written notice to the Board or to such person or persons as the Board may designate. Such resignation shall take effect at the time specified therein, and unless otherwise specified therein no acceptance of such resignation shall be necessary to make it effective. The Board may remove any officer with or without cause at any time. Any officer authorized by the Board to appoint a person to hold an office of the Corporation may also remove such person from such office with or without cause at any time, unless otherwise provided in the resolution of the Board providing such authorization. Any such removal shall be without prejudice to the contractual rights of such officer, if any, with the Corporation, but the election or appointment of an officer shall not of itself create contractual rights. Any vacancy occurring in any office of the Corporation by death, resignation, removal or otherwise may be filled by the Board at any regular or special meeting or by an officer authorized by the Board to appoint a person to hold such office.

Section 4.3. Powers and Duties. The officers of the Corporation shall have such powers and duties in the management of the Corporation as shall be stated in these by-laws or in a resolution of the Board of Directors which is not inconsistent with these by-laws and, to the extent not so stated, as generally pertain to their respective offices, subject to the control of the Board. A Secretary or such other officer appointed to do so by the Board shall have the duty to record the proceedings of the meetings of the stockholders, the Board of Directors and any committees in a book to be kept for that

purpose. The Board may require any officer, agent or employee to give security for the faithful performance of his or her duties.

ARTICLE V

Stock

Section 5.1. Certificates; Uncertificated Shares. The shares of stock in the Corporation shall be represented by certificates, provided that the Board of Directors of the Corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to any such shares represented by a certificate theretofore issued until such certificate is surrendered to the Corporation. Every holder of stock represented by certificates shall be entitled to have a certificate signed by or in the name of the Corporation by a Chairman or Vice Chairman of the Board or a President or Vice President, and by a Treasurer, Assistant Treasurer, Secretary or Assistant Secretary, representing the number of shares of stock in the Corporation owned by such holder. If such certificate is manually signed by one officer or manually countersigned by a transfer agent or by a registrar, any other signature on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if such person were such officer, transfer agent or registrar at the date of issue. Certificates representing shares of stock of the Corporation may bear such legends regarding restrictions on transfer or other matters as any officer or officers of the Corporation may determine to be appropriate and lawful.

If the Corporation is authorized to issue more than one class of stock or more than one series of any class, the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate which the Corporation shall issue to represent such class or series of stock, provided that, except as otherwise required by law, in lieu of the foregoing requirements, there may be set forth on the face or back of the certificate which the Corporation shall issue to represent such class or series of stock a statement that the Corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of such class or series of stock and the qualifications, limitations or restrictions of such preferences and/or rights. Within a reasonable time after the issuance or transfer of uncertificated shares of any class or series of stock, the Corporation shall send to the registered owner thereof a written notice containing the information required by law to be set forth or stated on certificates representing shares of such class or series or a statement that the Corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or

other special rights of such class or series and the qualifications, limitations or restrictions of such preferences and/or rights.

Except as otherwise provided by law or these by-laws, the rights and obligations of the holders of uncertificated shares and the rights and obligations of the holders of certificates representing stock of the same class and series shall be identical.

Section 5.2. Lost, Stolen or Destroyed Stock Certificates; Issuance of New Certificates. The Corporation may issue a new certificate of stock in the place of any certificate theretofore issued by it, alleged to have been lost, stolen or destroyed, and the Corporation may require the owner of the lost, stolen or destroyed certificate, or such owner's legal representative, to give the Corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate.

ARTICLE VI

Miscellaneous

Section 6.1. Fiscal Year. The fiscal year of the Corporation shall be determined by the Board of Directors.

Section 6.2. Seal. The Corporation may have a corporate seal which shall have the name of the Corporation inscribed thereon and shall be in such form as may be approved from time to time by the Board of Directors. The corporate seal may be used by causing it or a facsimile thereof to be impressed or affixed or in any other manner reproduced.

Section 6.3. Waiver of Notice of Meetings of Stockholders, Directors and Committees. Whenever notice is required to be given by law or under any provision of the certificate of incorporation or these by-laws, a written waiver thereof, signed by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders, directors or members of a committee of directors need be specified in any written waiver of notice unless so required by the certificate of incorporation or these by-laws.

Section 6.4. Indemnification. The Corporation shall indemnify to the full extent permitted by law any person made or threatened to be made a party to any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such person or such person's testator or intestate is or was a director or officer of the Corporation, is or was a director, officer, trustee, member, stockholder, partner, incorporator or liquidator of a Subsidiary of the Corporation, is or was a member of the Shareholders' Committee acting pursuant to the Amended and Restated Shareholders'

Agreement, dated as of May 7, 1999, among the Corporation and the Covered Persons listed on Appendix A thereto, as amended from time to time, or serves or served at the request of the Corporation as a director, officer, trustee, member, stockholder, partner, incorporator or liquidator of or in any other capacity for any other enterprise. Expenses, including attorneys' fees, incurred by any such person in defending any such action, suit or proceeding shall be paid or reimbursed by the Corporation promptly upon demand by such person and, if any such demand is made in advance of the final disposition of any such action, suit or proceeding, promptly upon receipt by the Corporation of an undertaking of such person to repay such expenses if it shall ultimately be determined that such person is not entitled to be indemnified by the Corporation. The rights provided to any person by this by-law shall be enforceable against the Corporation by such person, who shall be presumed to have relied upon it in serving or continuing to serve as a director or officer or in such other capacity as provided above. In addition, the rights provided to any person by this by-law shall survive the termination of such person as any such director, officer, trustee, member, stockholder, partner, incorporator or liquidator and, insofar as such person served at the request of the Corporation as a director, officer, trustee, member, stockholder, partner, incorporator or liquidator of or in any other capacity for any other enterprise, shall survive the termination of such request as to service prior to termination of such request. No amendment of this by-law shall impair the rights of any person arising at any time with respect to events occurring prior to such amendment.

Notwithstanding anything contained in this Section 6.4, except for proceedings to enforce rights provided in this Section 6.4, the Corporation shall not be obligated under this Section 6.4 to provide any indemnification or any payment or reimbursement of expenses to any director, officer or other person in connection with a proceeding (or part thereof) initiated by such person (which shall not include counterclaims or crossclaims initiated by others) unless the Board of Directors has authorized or consented to such proceeding (or part thereof) in a resolution adopted by the Board.

For purposes of this by-law, the term "Subsidiary" shall mean any corporation, partnership, limited liability company or other entity in which the Corporation owns, directly or indirectly, a majority of the economic or voting ownership interest; the term "other enterprise" shall include any corporation, partnership, limited liability company, joint venture, trust, association or other unincorporated organization or other entity and any employee benefit plan; the term "officer," when used with respect to the Corporation, shall refer to any officer elected by or appointed pursuant to authority granted by the Board of Directors of the Corporation pursuant to clauses (i), (ii), (iii) and (iv) of Section 4.1 of these by-laws, when used with respect to a Subsidiary or other enterprise that is a corporation, shall refer to any person elected or appointed pursuant to the by-laws of such Subsidiary or other enterprise or chosen in such manner as is prescribed by the by-laws of such Subsidiary or other enterprise or determined by the board of directors of such Subsidiary or other enterprise, and when used with respect to a Subsidiary or other enterprise that is not a corporation or is organized in a foreign jurisdiction, the term "officer" shall include in addition to any officer of such entity, any person serving in a similar capacity or as the manager of such entity; service "at the request of the Corporation" shall include service as a director or officer of the Corporation which

imposes duties on, or involves services by, such director or officer with respect to an employee benefit plan, its participants or beneficiaries; any excise taxes assessed on a person with respect to an employee benefit plan shall be deemed to be indemnifiable expenses; and action by a person with respect to an employee benefit plan which such person reasonably believes to be in the interest of the participants and beneficiaries of such plan shall be deemed to be action not opposed to the best interests of the Corporation.

To the extent authorized from time to time by the Board of Directors, the Corporation may provide to (i) any one or more employees and other agents of the Corporation, (ii) any one or more officers, employees and other agents of any Subsidiary and (iii) any one or more directors, officers, employees and other agents of any other enterprise, rights of indemnification and to receive payment or reimbursement of expenses, including attorneys' fees, that are similar to the rights conferred in this Section 6.4 on directors and officers of the Corporation or any Subsidiary or other enterprise. Any such rights shall have the same force and effect as they would have if they were conferred in this Section 6.4.

Nothing in this Section 6.4 shall limit the power of the Corporation or the Board of Directors to provide rights of indemnification and to make payment and reimbursement of expenses, including attorneys' fees, to directors, officers, employees, agents and other persons otherwise than pursuant to this Section 6.4.

Section 6.5. Interested Directors; Quorum. No contract or transaction between the Corporation and one or more of its directors or officers, or between the Corporation and any other corporation, partnership, limited liability company, joint venture, trust, association or other unincorporated organization or other entity in which one or more of its directors or officers serve as directors, officers, trustees or in a similar capacity or have a financial interest, shall be void or voidable solely for this reason, or solely because the director or officer is present at or participates in the meeting of the Board of Directors or committee thereof which authorizes the contract or transaction, or solely because his or her or their votes are counted for such purpose, if: (i) the material facts as to his or her relationship or interest and as to the contract or transaction are disclosed or are known to the Board or the committee, and the Board or committee in good faith authorizes the contract or transaction by the affirmative votes of a majority of the disinterested directors, even though the disinterested directors be less than a quorum; (ii) the material facts as to his or her relationship or interest and as to the contract or transaction are disclosed or are known to the stockholders entitled to vote thereon, and the contract or transaction is specifically approved in good faith by a vote of the stockholders; or (iii) the contract or transaction is fair as to the Corporation as of the time it is authorized, approved or ratified, by the Board, a committee thereof or the stockholders. Common or interested directors may be counted in determining the presence of a quorum at a meeting of the Board of Directors or of a committee which authorizes the contract or transaction.

Section 6.6. Form of Records. Any records maintained by the Corporation in the regular course of its business, including its stock ledger, books of account and minute books, may be kept on, or be in the form of, punch cards, magnetic tape, photographs,

microphotographs or any other information storage device, provided that the records so kept can be converted into clearly legible form within a reasonable time. The Corporation shall so convert any records so kept upon the request of any person entitled to inspect the same.

Section 6.7. Laws and Regulations; Close of Business. (a) For purposes of these by-laws, any reference to a statute, rule or regulation of any governmental body means such statute, rule or regulation (including any successor thereto) as the same may be amended from time to time.

(b) Any reference in these by-laws to the close of business on any day shall be deemed to mean 5:00 P.M. New York time on such day, whether or not such day is a business day.

Section 6.8. Amendment of By-Laws. These by-laws may be amended, modified or repealed, and new by-laws may be adopted at any time, by the Board of Directors. Stockholders of the Corporation may adopt additional by-laws and amend, modify or repeal any by-law whether or not adopted by them, but only in accordance with Article SIXTH of the certificate of incorporation.

EXHIBIT E

MARINO, TORTORELLA & BOYLE, P.C.

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August 24, 2012

VIA FEDERAL EXPRESS

Matthew W. Friedrich, Esq.
Boies, Schiller & Flexner, LLP
5301 Wisconsin Ave. NW
Washington, DC 20015

Re: *United States v. Aleynikov*, 10 Cr. 96 (S.D.N.Y.)
United States v. Aleynikov, 11-1126 (2d Cir.)
People v. Aleynikov, 2012 NY 060353 (CCNY)

Dear Mr. Friedrich:

In keeping with our telephone conversation of Wednesday, August 22, 2012, I write to formally demand that your client, Goldman Sachs (“Goldman”), honor its obligation under Delaware General Corporation Law and Goldman’s By-Laws to: (1) promptly indemnify my client, Sergey Aleynikov, for the actual and reasonable legal expenses, including attorneys’ fees and costs, that he incurred in securing a Judgment of Acquittal of all criminal charges brought against him by the United States Attorney for the Southern District of New York in connection with his alleged theft of Goldman’s high frequency trading platform (the “Federal Charges”); and (2) promptly begin to advance the actual and reasonable legal expenses, including attorneys’ fees and costs, that Mr. Aleynikov incurs to defend himself against state criminal charges recently instituted against him by the Manhattan District Attorney’s Office (the “State Charges”). The State Charges are based upon the same facts and circumstances underlying the Federal Charges of which Mr. Aleynikov was completely exonerated.

Background

As you are aware, Mr. Aleynikov was a Vice President in Goldman’s Equities Division from May 7, 2007 to June 5, 2009. On July 3, 2009, the FBI arrested Mr. Aleynikov for the alleged theft of Goldman’s high frequency trading platform. On February 11, 2010, a federal grand jury returned a three-count Indictment charging Mr. Aleynikov with violating three federal criminal statutes in connection with that alleged theft: (1) the Economic Espionage Act (EEA), 18 U.S.C. §§ 1832(a)(2), 1832(a)(4); (2) the National Stolen Property Act (NSPA), 18 U.S.C. § 2314; and (3) the Computer Fraud and Abuse Act (CFAA), 18 U.S.C. §§ 1030(a)(2)(C) and 1030(c)(2)(B)(i)-(iii).

MARINO, TORTORELLA & BOYLE, P.C.
ATTORNEYS AT LAW

Matthew W. Friedrich, Esq.
August 24, 2012 — Page 2

Although Mr. Aleynikov was initially represented by the Federal Defender, he retained our firm to represent him on April 28, 2010. Upon being engaged, our firm immediately expended substantial resources in attempting to secure a voluntary dismissal of the Indictment; to obtain reasonable discovery from the Government and third parties, including Goldman; to engage experts in Mr. Aleynikov's defense; to draft and file numerous pretrial motions, including a motion to dismiss the Indictment; and to prepare for trial.

On September 3, 2010, the Honorable Denise L. Cote, U.S.D.J., granted Mr. Aleynikov's motion to dismiss the Indictment in part and denied it in part, dismissing the CFAA count but declining to dismiss the EEA and NSPA counts, on which Mr. Aleynikov then proceeded to trial. On December 10, 2010, following an eight-day trial, a jury convicted Mr. Aleynikov on those two remaining counts of the Indictment. Judge Cote denied Mr. Aleynikov's extensive post-trial motions under Rules 29 and 33 of the Federal Rules of Criminal Procedure and, on March 18, 2011, sentenced him to a 97-month term of imprisonment. Mr. Aleynikov began serving his sentence immediately, having been incarcerated since February 24, 2011 as an alleged flight risk.

Following his sentencing, we represented Mr. Aleynikov in the appeal of his conviction and sentence to the United States Court of Appeals for the Second Circuit. The Court of Appeals heard oral argument on that appeal on the morning of February 16, 2012, and that evening issued an order summarily reversing the judgment of conviction on both counts and ordering that a Judgment of Acquittal be entered in Mr. Aleynikov's favor and that he be released from custody forthwith. Mr. Aleynikov was released from prison the following day and, on April 11, 2012, the Court of Appeals issued a formal opinion holding that his conduct did not constitute an offense under either the EEA or the NSPA. United States v. Aleynikov, 676 F.3d 71 (2d Cir. 2012). On June 5, 2012, following issuance of the Second Circuit's mandate, Judge Cote entered a Judgment of Acquittal in favor of Mr. Aleynikov, thus confirming his successful defense of the Federal Charges in their entirety.

On August 1, 2012, Mr. Aleynikov was arrested at a friend's home in New Jersey as an alleged "fugitive from justice" based on the State Charges, of which he was completely unaware. After being incarcerated in the Essex County Jail in Newark, New Jersey for one week while awaiting extradition, Mr. Aleynikov was extradited to New York and released on bail on August 9, 2012. We advised Mr. Aleynikov with respect to his waiver of extradition and secured his release on bail, and are now preparing to defend him against an indictment on the State Charges, which we understand will soon be forthcoming.

Mr. Aleynikov incurred substantial legal expenses to secure a successful resolution of the Federal Charges, and we anticipate he will incur actual and reasonable legal expenses of similar magnitude to defend against the State Charges. For the reasons set forth below, Goldman is obligated to indemnify Mr. Aleynikov for his actual and reasonable legal expenses relating to the Federal Charges and to advance his actual and reasonable legal expenses associated with the State Charges.

MARINO, TORTORELLA & BOYLE, P.C.
ATTORNEYS AT LAW

Matthew W. Friedrich, Esq.
August 24, 2012 — Page 3

Indemnification For Legal Expenses In Connection With The Federal Charges

Delaware law entitles corporate officers who have been successful in their defense of a criminal action to indemnification. Specifically, 8 Del. C. § 145(c) provides:

To the extent that a present or former director or officer of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in subsections (a) and (b) of this section [which include criminal proceedings such as the Federal Charges] or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

As a Vice President of Goldman's Equities Division, Mr. Aleynikov is an officer of the company entitled to indemnification pursuant to Article IV, Section 4.1 and Article VI, Section 6.4 of Goldman's Amended and Restated By-Laws (the "By-Laws").

Delaware courts and other courts called upon to construe Section 145(c) have uniformly read that provision to make the right to indemnification absolute, not discretionary. Stockman v. Heartland Indus. Partners, C.A. No. 4227-VCS, 2009 Del. Ch. LEXIS 131, at *41 (Del. Ch. July 14, 2009); see also FGC Holdings Ltd. v. Teltronics, Inc., 2007 Del. Ch. LEXIS 14 (Del. Ch. Jan. 22, 2007) ("[S]ubsection (c) grants an absolute right of indemnification to the movant, provided that he has been successful on the merits or otherwise."); Perconti v. Thornton Oil Corp., 2002 Del. Ch. LEXIS 51 (Del. Ch. May 3, 2002) ("Under 8 Del. C. § 145(c), an officer or director who meets the requirements of the statutory provision has an absolute right to indemnification.").

In order to qualify for indemnification, a corporate officer such as Mr. Aleynikov must have been "successful on the merits or otherwise in defense of any action." 8 Del. C. § 145(c). "Success," as that term is used in the statute, means "vindication . . . [,] any result other than conviction must be considered success." Merritt-Chapman & Scott Corp. v. Wolfson, 321 A.2d 138, 141 (Del. Super. 1974); Stockman, 2009 Del. Ch. LEXIS 131 ("An indemnitee in a criminal proceeding is successful any time she avoids a conviction"). As the Second Circuit has made clear, "'success' under § 145(c), does not mean moral exoneration. Escape from an adverse judgment or other detriment, for whatever reason, is determinative." Waltuch v. Conticommodity Servs., Inc., 88 F.3d 87, 96 (2d Cir. 1996); Zaman v. Amedeo Holdings, Inc., 2008 Del. Ch. LEXIS 60 (Del. Ch. May 23, 2008) ("The success on the 'merits or otherwise' standard is one that grants indemnification to corporate officials even when they have not been adjudged innocent in some ethical or moral sense."). Because Mr. Aleynikov was acquitted of the Federal Charges, he undeniably achieved success within the meaning of the statute. Accordingly, he is entitled to indemnification under 8 Del. C. § 145(c) for the actual and reasonable legal expenses he incurred in defending the Federal Charges from the date of his

MARINO, TORTORELLA & BOYLE, P.C.
ATTORNEYS AT LAW

Matthew W. Friedrich, Esq.
August 24, 2012 — Page 4

arrest on July 3, 2009, through the entry of a judgment of acquittal on June 5, 2012, which total \$2,336,040.88.

Advancement of Legal Expenses In Connection With The State Charges

Given that Mr. Aleynikov is being prosecuted by the Manhattan District Attorney, as he was prosecuted by the United States Attorney for the Southern District of New York, for actions he took while an officer of Goldman, he is entitled to advancement of his reasonable legal fees in connection with the State Charges under 8 Del. C. § 145(e) and Section 6.4 of Goldman's By-Laws. Although advancement of legal fees and expenses is permissive under Delaware law, Goldman's By-Laws make such payments mandatory. Specifically, Section 6.4 of the By-Laws provides:

Expenses, including attorneys' fees, incurred by any such person [including an officer such as Mr. Aleynikov] in defending any such action, suit or proceeding [including criminal charges such as the State Charges] shall be paid or reimbursed by the Corporation promptly upon demand by such person and, if any such demand is made in advance of the final disposition of any such action, suit or proceeding, promptly upon receipt by the Corporation of an undertaking of such person to repay such expenses if it shall ultimately be determined that such person is not entitled to be indemnified by the Corporation.

By-Laws, Article VI, Section 6.4; see Homestore, Inc. v. Tafeen, 888 A.2d 204, 212 (Del. 2005) ("The advancement authority conferred by section 145(e) is permissive. Nevertheless, mandatory advancement provisions are set forth in a great many corporate charters, bylaws and indemnification agreements.").

In accordance with 8 Del. C. § 145(e) and Section 6.4 of the By-Laws, we are providing you with the enclosed Undertaking, by which Mr. Aleynikov has promised to repay the actual and reasonable expenses advanced in connection with the State Charges if it shall ultimately be determined that he is not entitled to be indemnified by Goldman. We have agreed to defend Mr. Aleynikov on an hourly basis and have asked him to provide us with a retainer of \$500,000 to secure his payment of our fees and expenses, which we will charge against on a monthly payment with the understanding that he will replenish the retainer in increments of \$100,000 each time it is charged down to \$100,000.

For the foregoing reasons, we respectfully demand that Goldman: (1) promptly forward the \$2,336,042.56 in indemnification payments Goldman owes Mr. Aleynikov in connection with his successful defense of the Federal Charges; and (2) promptly advance the \$500,000 retainer associated with the State Charges, both made payable to "Marino, Tortorella & Boyle, P.C., Attorneys for Sergey Aleynikov."

MARINO, TORTORELLA & BOYLE, P.C.
ATTORNEYS AT LAW

Matthew W. Friedrich, Esq.
August 24, 2012 — Page 5

Thank you for your anticipated cooperation.

Very truly yours,



A handwritten signature in black ink, appearing to read "Kevin H. Marino".

Kevin H. Marino

cc: Mr. Sergey Aleynikov

UNDERTAKING

This Undertaking is made by Sergey Aleynikov ("Aleynikov") this 24 day of
August, 2012.

WHEREAS, Aleynikov is a former Vice President of Goldman Sachs ("Goldman"), a Delaware corporation.

WHEREAS, the Manhattan District Attorney's Office has commenced criminal proceedings against Aleynikov (the "State Charges") for actions he took in his capacity as an officer of Goldman;

WHEREAS, Goldman is obligated to advance to Aleynikov the reasonable legal fees and expenses, including attorney's fees, incurred in connection with the State Charges, pursuant to Del. Code Ann. tit. 8, § 145(e) and Section 6.4 of Goldman's By-Laws.

NOW THEREFORE,

Sergey Aleynikov hereby agrees to repay any expenses paid by Goldman in advance of the final disposition of the State Charges, including any attorney's fees, incurred on his behalf in defending such action, if it is ultimately determined that he is not entitled to be indemnified by Goldman Sachs as authorized in Del. Code Ann. tit. 8, § 145 and Section 6.4 of Goldman Sachs's By-Laws.

Dated: 8/24/12



SERGEY ALEYNIKOV